

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A display device comprising:

a thin film transistor including:

a gate electrode comprising a conductive material over one of substrates;
an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;

a semiconductor layer, and
source and drain wirings comprising a conductive material, which connected to the semiconductor layer; and

a pixel electrode connected to the thin film transistor,
wherein an end of the semiconductor layer is provided so as not to protrude from an end of the gate insulating layer.
2. (Original) A device according to claim 1, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.
3. (Original) A device according to claim 1, further comprising a protective film over the semiconductor layer.
4. (Original) A device according to claim 1, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.
5. (Original) A device according to claim 1, wherein the thin film transistor can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of the thin film transistor contains hydrogen and halogen and a semiconductor having a crystal structure.
6. (Original) A device according to claim 1, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

7. (Original) A device according to claim 1, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

8. (Original) A display device comprising:
a thin film transistor including:
a gate electrode comprising a conductive material over one of substrates;
an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;
a semiconductor layer, and
source and drain wirings comprising a conductive material, which is connected to the semiconductor layer; and
a pixel electrode connected to the thin film transistor,
wherein an end of the semiconductor layer is provided so as to coincide with an end of the gate insulating layer.

9. (Original) A device according to claim 8, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

10. (Original) A device according to claim 8, further comprising a protective Film over the semiconductor layer.

11. (Original) A device according to claim 8, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

12. (Original) A device according to claim 8, wherein the thin film transistor can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of the thin film transistor contains hydrogen and halogen, and a semiconductor having a crystal structure.

13. (Original) A device according to claim 8, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

14. (Original) A device according to claim 8, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

15. (Original) A display device comprising:
a thin film transistor including:
a gate electrode comprising a conductive material over one of substrates;
an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;
a semiconductor layer,
source and drain wirings comprising a conductive material, which is 25 connected to the semiconductor layer; and
one of a silicon nitride layer and a silicon oxynitride layer which is in contact with the source and drain wirings; and
a pixel electrode connected to the thin film transistor,
wherein an end of the semiconductor layer is provided so as not to protrude from 30 an end of the gate insulating layer.

16. (Original) A device according to claim 15, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

17. (Original) A device according to claim 15, further comprising a protective film over the semiconductor layer.

18. (Original) A device according to claim 15, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

19. (Original) A device according to claim 15, wherein the thin film transistor can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of the thin film transistor contains hydrogen and halogen, and a semiconductor having a crystal structure.

20. (Original) A device according to claim 15, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

21. (Original) A device according to claim 15, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

22. (Original) A display device comprising:

a thin film transistor including:

a gate electrode comprising a conductive material over one of substrates;

an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;

a semiconductor layer;

source and drain wirings comprising a conductive material, which is connected to the semiconductor layer, and

one of a silicon nitride layer and a silicon oxynitride layer which is in contact with the source and drain wirings; and

a pixel electrode connected to the thin film transistor,

wherein an end of the semiconductor layer is provided so as to coincide with an end of the gate insulating layer.

23. (Original) A device according to claim 22, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

24. (Original) A device according to claim 22, further comprising a protective film over the semiconductor layer.

25. (Original) A device according to claim 22, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

26. (Original) A device according to claim 22, wherein the thin film transistor can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of the thin film transistor contains hydrogen and halogen, and a semiconductor having a crystal structure.

27. (Original) A device according to claim 22, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

28. (Original) A device according to claim 22, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

29. (Original) A display device comprising:
a first thin film transistor including:
a gate electrode comprising a conductive material over one of substrates;
an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;
a semiconductor layer; and
source and drain wirings comprising a conductive material, which is connected to the semiconductor layer; and
a pixel electrode connected to the first thin film transistor,
a driving circuit having a second thin film transistor having a same structure as the first thin film transistor; and
a wiring layer which is extended from the driver circuit and connected the gate electrode of the first thin film transistor;
wherein an end of the semiconductor layer is provided so as not to protrude from an end of the gate insulating layer.

30. (Original) A device according to claim 29, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

31. (Original) A device according to claim 29, further comprising a protective film over the semiconductor layer.

32. (Original) A device according to claim 29, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

33. (Original) A device according to claim 29, wherein the first and second thin film transistors can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $5 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of each of the first and second thin film transistors contains hydrogen and halogen, and a semiconductor having a crystal structure.

34. (Original) A device according to claim 29, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

35. (Original) A device according to claim 29, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

36. (Original) A display device comprising:
a first thin film transistor including:
a gate electrode comprising a conductive material over one of substrates;
an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;
a semiconductor layer, and
source and drain wirings comprising a conductive material, which is connected to the semiconductor layer; and
a pixel electrode connected to the first thin film transistor,
a driving circuit having a second thin film transistor having a same structure as the first thin film transistor; and
a wiring layer which is extended from the driver circuit and connected to the gate electrode of the first thin film transistor,
wherein an end of the semiconductor layer is provided so as to coincide with an end of the gate insulating layer.

37. (Original) A device according to claim 36, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

38. (Original) A device according to claim 36, further comprising a protective film over the semiconductor layer.

39. (Original) A device according to claim 36, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

40. (Original) A device according to claim 36, wherein the first and second thin film transistors can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $\text{cm}^2/\text{V}\cdot\text{sec}$,

and the semiconductor layer of each of the first and second thin film transistors contains hydrogen and halogen, and a semiconductor having a crystal structure.

41. (Original) A device according to claim 36, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

42. (Original) A device according to claim 36, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

43. (Original) A display device comprising:

a first thin film transistor including:

a gate electrode comprising a conductive material over one of substrates;

an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;

a semiconductor layer;

source and drain wirings comprising a conductive material, which is connected to the semiconductor layer; and

one of a silicon nitride layer and a silicon oxynitride layer which is in contact with the source and drain wirings;

a pixel electrode connected to the first thin film transistor,

a driving circuit having a second thin film transistor having a same structure as the first thin film transistor, and

a wiring layer which is extended from the driver circuit and connected to the gate electrode of the first thin film transistor,

wherein an end of the semiconductor layer is provided so as not to protrude from an end of the gate insulating layer.

44. (Original) A device according to claim 43, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

45. (Original) A device according to claim 43, further comprising a protective film over the semiconductor layer.

46. (Original) A device according to claim 43, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, NV, and Al as a main component.

47. (Original) A device according to claim 43, wherein the first and second thin film transistors can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of each of the first and second thin film transistors contains hydrogen and halogen, and a semiconductor having a crystal structure.

48. (Original) A device according to claim 43, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

49. (Original) A device according to claim 43, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

50. (Original) A display device comprising:

a first thin film transistor including:

a gate electrode comprising a conductive material over one of substrates;

an island shape gate insulating film including at least one of a silicon nitride layer, a silicon oxynitride layer, and a silicon oxide layer, which is in contact with the gate electrode;

a semiconductor layer,

source and drain wirings comprising a conductive material, which is connected to the semiconductor layer; and

one of a silicon nitride layer and a silicon oxynitride layer which is in contact with the source and drain wirings;

a pixel electrode connected to the first thin film transistor,

a driving circuit having a second thin film transistor having a same structure as the first thin film transistor; and

a wiring layer which is extended from the driver circuit and connected to the gate electrode of the first thin film transistor,

wherein an end of the semiconductor layer is provided so as to coincide with an end of the gate insulating layer.

51. (Original) A device according to claim 50, further comprising an adhesion improving layer comprising one of a metal material and a metal oxide material for pretreatment before forming at least one of layers to be formed.

52. (Original) A device according to claim 50, further comprising a protective film over the semiconductor layer.

53. (Original) A device according to claim 50, wherein the conductive material of at least one of the gate electrode and the source and drain wirings contains one selected from the group consisting of Ag, Au, Cu, W, and Al as a main component.

54. (Original) A device according to claim 50, wherein the first and second thin film transistors can be operated at an electric field effect mobility of $1 \text{ cm}^2/\text{V}\cdot\text{sec}$ to $15 \text{ cm}^2/\text{V}\cdot\text{sec}$, and the semiconductor layer of each of the first and second thin film transistors contains hydrogen and halogen, and a semiconductor having a crystal structure.

55. (Original) A device according to claim 50, wherein the display device is a liquid crystal display device and the substrates sandwich liquid crystal.

56. (Original) A device according to claim 50, wherein the display device is mounted in one of a television receiver, a personal computer, a cellular phone, an information display, and an advertising board.

57. – 67. (Canceled).